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CLAIMS

- 1 A borehole tool, comprising: a tool body; a series of arms connected to the tool body and moveable radially relative thereto; and a series of pads mounted on the arms so as to be pivotable relative thereto;
5 characterised in that the pads are pivotable about a radial axis relative to the tool body, and the pads are elongate pads adjacently arranged to provide different circumferential coverage according to the orientation with respect to the longitudinal axis of the borehole.
- 2 A tool as claimed in claim 1, the pads are connected to the arms
10 such that the orientation of the pads relative to the tool body is determined by the extent of the arms in the radial direction.
- 3 A tool as claimed in claim 1 and 2, wherein the pivoting of pads is synchronised such that the pads adopt a substantially regular pattern of orientation.
- 15 4 A tool as claimed in claim 3, wherein adjacent pads are interconnected so as to synchronise pivoting.
- 5 A tool as claimed in any preceding claim, wherein the pads are arranged in a ring, each pad being connected at its ends to the adjacent pads.
- 20 6 A tool as claimed in any preceding claim, wherein the arms are arranged symmetrically around the tool body.
- 7 A tool as claimed in any preceding claim, wherein each arm is connected to the tool body at one end by a pivot or hinge that allows the arm to move in a radial plane relative to the tool body.
- 25 8 A tool as claimed in any preceding claim, wherein the ends of the arms are be connected to the pads.
- 9 A tool as claimed in any preceding claim, wherein the arms can move between two limit positions: the first in which the arm lies substantially parallel to the tool body; and the second in which the
30 arm projects away from the tool body in a radial direction to contact the borehole wall.

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- 10 A tool as claimed in any preceding claim, wherein the series of arms
comprises two sets of arms separated along the tool body with the
series of pads encircling the body between the sets of arms.
- 5 11 A tool as claimed in claim 10, wherein the arms of each set extend
from the connection on the tool body towards the other set.
- 12 A tool as claimed in claim 11, wherein the two sets of arms are
arranged on the tool body in an angularly offset configuration.
- 10 13 A tool as claimed in claim 12, wherein the pads are connected to the
arms in such a way that one end of a pad is connected to an arm
from the first set and the other end of the pad is connected to the
adjacent arm of the second set.
- 14 A tool as claimed in any preceding claim, wherein the pads form a
zigzag array extending around the circumference of the borehole.
- 15 15 A tool as claimed in claim 14, wherein each arm is connected to two
pads at adjacent ends.
- 20 16 A tool as claimed in any of claims 10-13, wherein the ends of one
set of arms are located in a fixed position on the tool body and the
ends of the other set are located on the tool body by means of a
sliding ring which can be driven along the tool body to cause the
arms of both sets to extend or retract.
- 25 17 A tool as claimed in claim 16, further comprising a detector for
detecting the angle between any arm and the tool axis.
- 18 A tool as claimed in claim 16 or 17, wherein the location of the arms
on the ring is provided so as to allow axial movement of the ends of
the arms relative to the tool body.
- 30 19 A tool as claimed in claim 18, further comprising a detector for
detecting the axial position of the ring and the location point of each
arm.
- 20 The use of a tool as claimed in any of claims 17, 18 or 19 to
determine the size of a borehole in which it is positioned.

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- 21 The use of a tool as claimed in claim 18 or 19 to determine the shape of a hole in which it is positioned.